

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF WEST VIRGINIA
AT CHARLESTON

DANIEL F. FITZGIBBON, JR.,

Plaintiff

v.

Civil Action No.: 2:02-1288

EICO, INC., SPORT SUPPLY GROUP,
INC., d/b/a Athletic Connection,
COAL-MAC, INC., ARCH OF WEST
VIRGINIA, a Division of Apogee
Coal Co., ALEX ENERGY, INC.,
PEERLESS EAGLE COAL CO., INDEPENDENCE
COAL CO., INC., d/b/a Black Castle
Mining Co., BANDMILL COAL CORPORATION,
HIGHLAND MINING COMPANY,

Defendants

MEMORANDUM OPINION AND ORDER

On June 20, 2005, the parties filed their joint statement of issues in dispute, listing several claim terms appearing in United States Patent No. 4,913,233 ("`233 patent") that require construction. Three of those terms subsequently were resolved by stipulation.¹ The following five terms remain in dispute: 1) "bag" or "bag-like device" or "inflatable bag-like

¹ They are: "inflation fluid"; "support provided by the device"; and "simultaneous detonation of the explosive material within the holes."

device"²; 2) "disposed" or "disposing"; 3) "spaced relation to the uppermost portion of the first quantity of explosive material"; 4) "a first relatively large quantity of explosive material"; and 5) "a second relatively small quantity of explosive material." The '233 patent sets forth methods of field blasting of earth formations using inflatable devices for suspending stemming materials or explosives in boreholes. The issues herein arise, then, from methods claims.

A Markman hearing³ was conducted on July 29, 2005, prior to which the parties fully briefed their respective positions on the meanings of the disputed terms.

² Defendants filed, on May 11, 2005, their submission of terms in need of construction. Though the submission indicated that the terms "bag" or "bag-like device" or "inflatable bag-like device" required construction, the Markman brief filed by defendants on July 12, 2005, contained a discussion only of the terms "bag" or "bag-like". The parties stipulated as to the meaning of "device". It is not clear why defendant did not discuss the term "inflatable bag-like device", but it seems that "inflatable" has clear meaning that is not inconsistent with the patent. Inasmuch as the term "bag" seldom appears in isolation in the '233 patent, and because the device at issue is described as "bag-like", the court declines to focus on the single component "bag" of the entire term in dispute.

³ See Markman v. Westview Instruments, 52 F.3d 967 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996).

I.

The words of a claim in a patent "are generally given their ordinary and customary meaning." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). The ordinary and customary meaning is that which "the term would have to a person of ordinary skill in the art in question . . . as of the effective filing date of the patent application." Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc) citing Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004). When determining a term's meaning, "there is no magic formula or catechism for conducting claim construction" and the court is not "barred from considering any particular sources or required to analyze sources in any particular sequence, so long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence." Phillips at 1324 (citations omitted).

The intrinsic evidence includes the claims themselves, the remainder of the specification, and the prosecution history. At the beginning, "the context in which a term is used in the asserted claim can be highly instructive." Phillips at 1314.

Additionally, "[o]ther claims of the patent in question, both asserted and unasserted, can be valuable sources of enlightenment. . . ." Phillips at 1314 citing Vitronics, 90 F.3d at 1582. Claims also "must be read in view of the specification, of which they are a part" (Phillips at 1315 quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 978 (Fed. Cir. 1995) (en banc)), and the specification "[u]sually . . . is dispositive; it is the single best guide to the meaning of a disputed term" (Phillips, at 1315 quoting Vitronics, 90 F.3d at 1582).

Further, the court should "consider the patent's prosecution history . . . [which] consists of the complete record of the proceedings before the [Patent and Trademark Office] and includes the prior art cited during the examination of the patent." Phillips at 1317. But "because the prosecution history represents an ongoing negotiation between the [Patent and Trademark Office] and the applicant, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips at 1317. The prosecution history is useful to "exclude any interpretation that was disclaimed during prosecution." ZMI Corp. v. Cardiac Resuscitator Corp., 844 F.2d 1576, 1580 (Fed. Cir. 1988).

Extrinsic evidence "consists of all evidence external to the patent and the prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Phillips at 1317 quoting Markman, 52 F.3d at 980. It is "viewed . . . in general as less reliable than the patent and its prosecution history in determining how to read claim terms . . ." and is "unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." Phillips at 1318.

Notwithstanding the valuable guidance of the Federal Circuit set forth above, that court also has stated that "[i]n some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." Phillips at 1314.

II.

A. The Parties' Proposed Construction

Plaintiff proposes the following terms construction:

1. Spaced relation to the uppermost portion of the first quantity of explosive material: *There is an air-gap in the borehole between the top of the lower-most explosive material and the bag-like device above it.*
2. First relatively large quantity of explosive material: *The larger quantity of explosive material placed within the borehole.*
3. Second relatively small quantity of explosive material: *The smaller quantity of explosive material placed in the borehole.*
4. Disposed or disposing: *Placed, placing, or causing to be placed.*
5. Bag-like device: *An item similar to, or characteristic of, an inflatable body of flexible material that is made, or adapted, to perform a function.*⁴

⁴ See plaintiff's memorandum, footnote 2. Plaintiff proposed this definition anticipating that the court would decline to separately define the term "bag."

In contrast, defendants propose the following:

1. Spaced relation to the uppermost portion of the first quantity of explosive material: *The bag-like device is sufficiently spaced within a borehole above the top of the explosive material to form an air gap in the borehole between the bag-like device and the explosive material, with the air gap being approximately 8% to 16.7% of the borehole.*
2. First relatively large quantity of explosive material: *The major charge or quantity of total explosive material within the borehole.*
3. Second relatively small quantity of explosive material: *The minor charge or quantity of explosive material within the borehole, with the major charge being 3-5 times the quantity of the minor charge.*
4. Disposed or disposing: *The bag-like device while in a flat and uninflated state is placed in a particular order or place to accomplish the special effect or purpose of the device.*
5. Bag-like device: *A device comprised of multiple polymeric sheets sealed along the edges thereof and capable of being closed at one end which lies flat when uninflated.*⁵

⁵ Defendants modified their proposed definition at the Markman hearing on July 29, 2005, after the release of Phillips by the Federal Circuit. Defendants' initial proposed construction was "a flexible device capable of being closed at one end comprised of at least one polymeric sheet sealed along the edges thereof which lies flat when uninflated, of disc-like, square, tubular, or doughnut conformation."

- B. "Spaced relation to the uppermost portion of the first quantity of explosive material"; "first relatively large quantity of explosive material"; and "second relatively small quantity of explosive material"

Defendants state that plaintiff's proposed construction should be modified because it has "no limits at all," but they recognize that the parties' "proposed definitions [for these three terms]. . . are not that divergent, and consequently the [c]ourt is free to choose from the definitions proposed by either side." (Def. Mem. at 18.)

Though defendants argue that they do "not seek to limit the definition of the specific examples set forth in the '233 [p]atent, but rather merely state[] the context of the '233 [p]atent in a way that is not limitless" (Def. Resp. at 15), it appears that defendants have indeed suggested limitations based on the examples. Defendants' proposed constructions would not allow "the air gap" to fall below approximately 8% of the borehole, or to rise above approximately 16.7%, nor would they allow the ratio of the major charge to minor charge of explosive material fall outside the 3 to 5 range.

At the hearing conducted on July 29, 2005, defense counsel, apparently referring to Figure 10, stated that the ratio

proposed with respect to the minor and major charges of explosive material was formulated using an example described in columns 11 and 12 of the '233 patent. Using the numbers provided in the example, he said, the ratio of the major charge to the minor charge appears to be 3.56. Indeed, the example at one point refers to the approximate weight of the explosive material (ammonium nitrate/fuel oil) as being 634 pounds for the major charge and 178 pounds for the minor charge, which would yield a ratio of 3.5618. Defendants suggest, to avoid unduly limiting the patent, that the ratio should fall in a range between 3 and 5. Defendants offer no basis for that selected range.

The arbitrary nature of the ratio range chosen by the defendants is illustrated by the further reference in the example to the use of still other charges:

More than two of the inflatable devices 44 can be used, additional devices 44 being used to support additional charges of explosive material at different locations within the borehole 50.

Correspondingly, additional charges result in additional air gaps and, so, the air gaps may not be squeezed into an arbitrary range of 8% to 16.7% of the borehole.⁶

⁶ Presumably, the 16.7% figure is based on the reference in the example at column 12, lines 6 through 10, to a borehole of a length of as much as 60 feet and to two air gaps, each five

Similarly, according to defendants' responsive brief, they propose limiting the space relationship between the explosive material and the bag-like device based on "the context" of the disclosure of the '233 patent and to distinguish the '233 patent from an earlier one, U.S. Patent No. 4,846,278. Defendants do not elaborate on the context which they suggest supports their proposed limitation, nor do they explain how the '233 patent can be distinct from the prior patent only by the application of a limited space relation. Furthermore, defendants propose their suggested restrictions based on calculations which appear to have been generated from numbers provided in a single illustrative context.

It seems that defendants have proposed limitations arbitrarily, with no sufficient basis in the claims themselves or the specifications. Inasmuch as defendants derived the figures on which their calculations are made from selected portions of examples appearing in the '233 description of preferred embodiments, the suggested limitations are not within the broader meanings of the terms at issue.

feet in length, so that the ten feet of air gaps is $\frac{1}{6}$ of a 60-foot borehole or 16.67%. The source of the 8% figure may possibly be one air gap of five feet in a 60-foot borehole which would constitute $\frac{1}{12}$ of the borehole or 8.33%.

The court adopts the construction placed on all of the terms in this category as offered by the plaintiff and set forth in items numbered 1, 2 and 3 on page 6, supra.

C. "Disposed" or "disposing"

Defendants suggest that "the parties[]" proposed definitions are similar, except that [plaintiff's] proposed definition departs from the context of his '233 [p]atent because it does not include the important teaching that the inflatable device is uninflated and flat while being disposed within the borehole . . ." (Def. Mem. at 17.) In support, defendants argue that the patent claims "recite separate steps for 'disposing' and 'inflating.'" (Def. Resp. at 13.) Indeed, according to the patent, the "inflatable devices of the invention are positioned within boreholes in a deflated condition and are inflated at the desired location. . ." ('233 patent, "Summary of the Invention," Column 2, Lines 25-27.)

It is noted, however, that neither the claims nor the specification appear to limit disposition to inflatable materials. Various claims, for example, refer to disposing "explosive material" or "stemming material" or "material," none

of which would constitute the disposition of an inflatable device. These articles almost certainly do not inflate, and likely do not lie flat. Thus, defendants' proposed requirement that disposition occurs only while an article is in a "flat and uninflated state" is unrealistic inasmuch as it imposes undue limitations on the general use of that term throughout the '233 patent. Moreover, while the patent may teach that certain articles are disposed in an uninflated position, defendants have offered no support for their contention that the articles must lie "flat" prior to disposing.

The court adopts the construction given by plaintiff to the terms "disposed" or "disposing" and set forth in numbered item 4 at page 6, supra, except that the court declines to adopt the phrase "causing to be placed", inasmuch as it appears that "placed" or placing" adequately defines the terms "disposed" or "disposing" in the '233 patent.

D. "Bag-like device"

The parties have stipulated that a "device" is "an article made, or adapted, to perform a function," and the stipulation is adopted for purposes of construction of the term

at issue. In the summary of the invention, the '233 patent indicates "[t]he devices of the invention can be formed of various flexible polymeric materials including polyvinylchlorides, low density polyethylenes, and polyurethane films in selected thicknesses." (Col. 2, Lines 29-33, emphasis supplied.) The summary goes on to explain that "the selected material forming the present inflatable devices must have the capability to stretch to a degree sufficient to cause the device to be firm within the borehole and yet resist continued stretching . . . which would cause the device to fall." (Col. 2, Lines 41-47, emphasis supplied.) The "present inflatable devices can be shaped in various conformations including double-ended tubular conformations, disc-like conformations, and 'flat' square and rectangular conformations as examples." (Col. 2, Lines 47-51, emphasis supplied.)

Defendants contend that the teachings of the patent include only configurations that are comprised of polymeric "sheets" that "'lie flat' when uninflated." (Def. Mem. at 13.) They cite portions of the '233 patent's description of the preferred embodiments (see Col. 8, Line 36; Col. 9, Lines 29, 57;

Col. 10, Lines 7-11)⁷ to show that the materials used must display such characteristics. Defendants have pointed to no language, however, that requires the use of polymeric sheets or requires that any such sheets lie flat when uninflated. Rather, they have shown only that certain materials are suggested by the patentee. The only requirement flowing from the summary language is that the device material "have the capability to stretch . . . and yet resist continued stretching . . ." The remainder of the summary states that certain materials and conformations "can" be used.

Courts are "cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification." Lemelson v. United States, 752 F.2d 1538, 1552 (Fed. Cir. 1985). Here, defendants have cited various portions of the patent that appear to describe materials favored by the patentee. Without limiting language, however, it is not for the court to confine the components of the patent to the described

⁷ Defendants represent that column 10, lines 7-11 teach that configurations that do not lie flat are "ineffective." (Def. Mem. at 13.) That portion of the '233 patent reads, "While the device [numbered on the diagram as 36] is useful, a primary teaching of the invention is that the 'flat' configurations of the present inflatable devices, such as shown in figures 6 through 9, act to function in a superior manner relative to the device 36." The cited language does not convey that non-flat configurations are ineffective.

examples. "A patentee may claim an invention broadly and expect enforcement of the full scope of that language absent a clear disavowal or contrary definition in the specification." Home Diagnostics, Inc. v, Lifescan, Inc., 381 F.3d 1352, 1357 (Fed. Cir. 2004). The description appearing in the summary of the patent, together with the actual language of each disputed claim appears to articulate that stretchable material of various shapes can be fashioned into an inflatable bag-like device consistent with the teaching of the '233 patent. Defendants seek restrictions not required within the corners of the patent, which contains no "clear disavowal or contrary definition" to that proposed by plaintiff. See Home Diagnostics, Inc. at 1357.

Defendants next ask the court to read the term "bag-like device" in consideration of other patents filed by plaintiff, including U.S. Patent No. 4,919,203 (" '203 patent"), which is comprised of the apparatus claims for which plaintiff initially applied in conjunction with the '233 patent methods claims.⁸ (Def. Mem. at 15, citing U.S. Patent Nos. 5,000,261; 5,273,110; 6,502,631; and Def. Resp. Mem. at 11, citing U.S.

⁸ Plaintiff filed a patent application comprising the claims of both the '203 patent and the '233 patent on March 10, 1988. The divisional application for the '233 patent was filed November 28, 1988.

Patent No. 4,919,203.) Aside from the '203 patent, defendants have not designated any of the other three patents as having a significant connection to the '233 patent or as prior art that was considered during the examination of the patent. It does not appear, then, that these three are part of the prosecution history or the intrinsic evidence. In any event, a survey of the patents cited by defendants does not reveal a clear contrary meaning to that implicit in the '233 patent.

Defendants argue that two of plaintiff's other patents do not "embrace" any spherical, oval, or "non-flat" conformation, and that a third employs the term "ball," evidencing plaintiff's awareness at the time of his application that playground balls were used for the same purpose as the bag-like device. Thus, defendants conclude, plaintiff made a conscious decision to exclude the spherical conformation from his application for the '233 patent. However, a "clear disavowal" of the spherical conformation is not present. See Home Diagnostics, Inc. at 1357. Moreover, defendants appear to ask the court to construct a definition of exclusion by specifying what is not described in the '233 patent. The court's task is to construe the terms before it, not to expel embodiments.

The '203 patent is directly connected to this one inasmuch as the two initially were filed in a single application. The '203 patent for apparatus claims describes an "inflatable body means," which was changed from plaintiff's initial preferred term "flexible body member." Defendants argue that "bag-like device," as it appears in the '233 patent, must have a different meaning than "body means" because plaintiff did not change the term during his prosecution of the '233 patent. They aver that the court should presume that the different terms have different meanings. It has not been shown, however, that the term "bag-like device" of the '233 patent is inconsistent with the term "body member" of the '203 patent, and different terminology may have been selected for a myriad of reasons. While the selected words may have different meanings, it does not follow that the difference is sufficient to amount to the "clear disavowal or contrary definition" necessary to discredit the meaning gleaned from the claims and specification. See Home Diagnostics, Inc. at 1357. Plaintiff's proposed construction of "bag-like device" is in agreement with the context of the '233 patent, but the meaning suggested by defendants would impose limitations not required by the patent itself or by the prosecution history.

Defendants further argue that the characteristic of inflatability is not inherent in the term "bag-like device." The point is well taken. Given that the term often is preceded in the patent by the adjective "inflatable" it does not appear that the isolated term "bag-like" necessarily implies an inflatable device. Additionally, though defendants' proposed definition proves too restrictive, plaintiff's construction broadly encompasses any conceivable "body of flexible material." This meaning potentially reaches numerous objects not contemplated by the patent. Here, upon consultation of The American Heritage Dictionary of the English Language, the court would include in its construction an indication that "bag-like" implies that an object is a "container," rather than simply a "body," inasmuch as "container" is an integral part of the definition of "bag". This application does not run afoul of the teachings of the patent which show, at the least, that the bag-like devices must be capable of containing air or another fluid substance so as to sustain inflation. Finally, the court would supplement plaintiff's suggested construction with "having the capability to stretch," a phrase taken directly from the requirements discussed in the summary of the invention. Otherwise, plaintiff's proposed construction appears consistent with the indications of the '233

patent, and especially the description contained in the summary of the invention.

III.

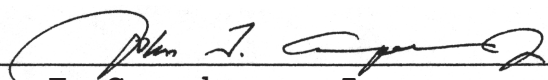
For the reasons stated herein, it is ORDERED that the disputed terms of the '233 patent be, and they hereby are, construed as follows:

1. "Spaced relation to the uppermost portion of the first quantity of explosive material" shall mean: There is an air-gap in the borehole between the top of the lower-most explosive material and the bag-like device above it.
2. "First relatively large quantity of explosive material" shall mean: The larger quantity of explosive material placed within the borehole.
3. "Second relatively small quantity of explosive material" shall mean: The smaller quantity of explosive material placed within the borehole.
4. "Disposed" or "disposing" shall mean: Placed or placing.
5. "Bag-like device" shall mean: An item similar to, or characteristic of, an inflatable container composed of

flexible material having the capability to stretch that is made, or adapted, to perform a function.

The Clerk is directed to forward copies of this written opinion and order to all counsel of record.

DATED: August 10, 2005



John T. Copenhaver, Jr.
United States District Judge